

DOCUMENT RESUME

ED 320 638

JC 900 363

AUTHOR Palmer, Jim
TITLE The President's Role in Student Tracking.
INSTITUTION George Mason Univ., Fairfax, VA. Center for Community Coll. Education.
PUB DATE Jul 90
NOTE 12p.
PUB TYPE Viewpoints (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Administrator Role; *College Outcomes Assessment; *College Presidents; Community Colleges; Data Analysis; *Data Collection; Higher Education; Outcomes of Education; *Research Design; Research Utilization; Student Records; Two Year Colleges

ABSTRACT

Today's outcomes assessment movement places great expectations on a college's ability to generate longitudinal data on student flow and achievement. Though computers and data managers will play an important role in meeting these expectations, outcomes assessment is not just a data collection task. Its success depends on how clearly the goals of the inquiry are stated and how the results of the inquiry are used. The president's involvement will ensure that data collection yields needed insights into student goals and expectations and the effects of college experience on their career and academic development. A central leadership task is to specify the indicators of student progress and outcomes that the college will use. These indicators should be tied to the college's mission, have clear operational definitions, and allow the college to spot trends in such areas as course completion, retention, transfer, and job attainment rates. While much of the data for a tracking system is available through routine student records, tracing the academic and career experiences of students once they leave the college is more difficult. Presidents can help overcome these difficulties by committing sufficient financial resources to follow-up studies and personally working with the presidents of neighboring four-year colleges. Presidents should also play a role in setting guidelines for reporting and using student tracking data. They should require that outcomes reports be brief; focus on no more than one, clearly defined indicator at a time; avoid rank-order comparisons and complex inferential statistics; and stress that indicators are not absolute measures. (WJT)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *



ED320638

The President's Role in Student Tracking

by Jim Palmer
Associate Director, Center for Community College Education
George Mason University

July 1990

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

J. Palmer

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

X This document has been reproduced as
received from the person or organization
originating it.
☐ Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

BEST COPY AVAILABLE

JC 900 363

The President's Role in Student Tracking

by Jim Palmer
Associate Director, Center for Community College Education
George Mason University

Demands for information on student outcomes have spurred the development of student tracking systems, both at the state and institutional levels. These systems usually take the form of computerized data bases that array student data longitudinally, thus illuminating the experiences of students over time. While traditional data collection efforts gauge the magnitude of the college enterprise, providing data such as the number of student enrolled in each fall term or the number of students who graduate in any given year, tracking systems capture the ways student cohorts use the college from term to term and provide evidence of student, flow, persistence, and attainment. What proportion of entering students earn the associate degree? What proportion take only one or two courses? What are the students' stop-in and stop-out patterns? What proportion transfer to four-year institutions? What are the students' educational goals at entrance and how do those goals change over time? These are the types of questions that student tracking systems have the potential to answer.

Because tracking systems represent a change in the way student data are managed, most of the literature on student

tracking is technical in nature, addressing the concerns of data processing personnel, institutional researchers, and others who are charged with the responsibility of creating data bases used to track student progress. Much of this literature focuses on data base construction and maintenance, on the ways student data from different college offices can be merged into a single file, and on the ways software packages can be used to generate reports comparing the educational experiences of different student groups (for example, minorities versus whites, part-timers versus full-timers, or older students versus those of traditional college age). This focus presents student tracking as a data processing task, one in which the computer is used to organize student data (such as surveys of student goals, scores on tests of basic skills, course grades, and follow-up surveys) in ways that chart the progress of student cohorts over time. (Cohorts are usually defined in terms of the students' dates of entrance. Thus, all students entering the college in the fall of 1990 would form one cohort, those entering in the spring of 1991 would form another cohort, and so on. Each cohort is tracked until the number of students remaining in the cohort is prohibitively small.)

Technical issues are important, because data management is at the heart of student tracking. But too much emphasis on technical matters masks the important role policy makers, particularly presidents, play in assuring the success of a

college's tracking system. A technically sound system using state-of-the-art computers will be of little use if it does not address policy issues that are of concern to the college or if no provision has been made for using data generated by the system to inform discussions of institutional effectiveness. College presidents can get the tracking system off to a good start by articulating the purposes of the tracking system, assuring that data needed to meet those purposes are available to those building the tracking system, and specifying how data generated by the tracking system will be reported and used.

What Does The College Want To Know?

The contents of tracking system (that is, the data to be included for each student) generally fall into three categories: measures of the attributes students bring with them to the college (such as ethnicity, educational goals, or academic ability) term-by-term measures of academic performance (such as grade point averages earned each semester or credits earned as a proportion of total credits attempted); and measures of success after the student leaves the college (such as transfer to a four-year institution or job obtainment). By arraying these data longitudinally, it is possible to assess student progress at the college (as well as outcomes after the student leaves) against numerous attribute variables (student goals, ethnicity, etc.) The task

faced by college leaders is to determine what it is the college wants to know about students and, hence, what data should be included in the tracking system.

A central part of this leadership task is to specify indicators of student progress and outcomes that the college will use to assess its role in helping students advance through the educational pipeline or otherwise meet their educational goals. These indicators should be tied to the college's mission, allowing the college to spot trends in such areas as course completion, term-to-term retention, transfer to four-year institutions, or job-obtainment rates. In addition, the indicators should have clear operational definitions. For example, an indicator of student success in the college's developmental studies program might be defined as follows:

The percent of students who--within two years of completing the college's sequence in remedial reading and writing --successfully complete the college's freshman-level composition course with a "C" grade or better.

Another indicator might take the form of a transfer rate, defined as follows:

the percent of first-time students (those with no prior college experience) who--within five years of enrolling at the community college--complete at least six credits and enroll in at least one course at a four-year college.

The specification of these indicators leads to the contents of the tracking system's data base. The indicators cited above, for example, require data on the courses students take

each term, the grades and credits earned in those courses, the previous educational experiences of entering students, and the transfer of students four-year colleges.

Any number of indicators can be defined, so long as the college can sustain the requisite data collection and processing effort. Does the college want to analyze course completion rates by ethnicity, gender, handicapped status, or receipt of financial aid? If so, the appropriate data elements will have to be included in each student record. Are indicators of student satisfaction with the college needed? If yes, student responses to surveys may need to be folded into the data base. Is it desirable to compare the graduation rates of students majoring in different program areas? In that case, each student record in the data base needs to include a field for program major. The more the college wants to know about its students, the larger the student tracking data base. The college president must balance the need for multiple measures of student outcomes with the practical need to minimize data base size.

Tracking Students After They Leave The College

Much of the data needed to build a tracking system is available through routine student records. Most colleges have at least some data on attributes, such as student demographics, scores on tests of basic skills, or student educational objectives. In addition, measures of term-by-

term academic progress are readily available in the form of course grades noted on student transcripts. Tracking systems may fall short, however, in tracing the academic and career experiences of students once they have left the college. Unless more is done to gather information on transfer rates, job obtainment rates, and other indicators of the success of former students, tracking systems will do little more than gauge persistence and attendance patterns at the community college itself. This is a serious limitation, especially in light of the fact that less than ten percent of all community college students earn an associate degree; in the absence of this institutional cachet, which at least serves as a proxy measure for student achievement, other indicators of student success are needed.

College leaders, then, can make a significant contribution to the tracking process by marshalling the resources and the will needed to gather information on former students, both graduates and those who leave without earning a degree. In some cases, this task will be made easier by state mandates requiring four-year institutions to provide feeder community colleges with information on the academic progress and baccalaureate attainment of transfer students. But in the absence of state assistance, community colleges themselves should take the initiative by increasing response rates on follow-up surveys (which usually fall at 50 percent or less) and requesting that neighboring four-year

institutions provide information on transfer students. Response rates depend on the resources and staff time devoted to the survey effort, as well as on the expertise of those conducting the survey. Information from four-year colleges is forthcoming only when community colleges identify and make contacts with the baccalaureate-granting institutions that receive the majority of their transfer students. In both instances, the president's support is crucial. By committing sufficient resources for follow-up surveys and personally working with the chief executive officers at neighboring four-year institutions, presidents can do much to assure that tracking systems provide information beyond the completion of courses at the community college itself.

How Will The Data Be Used?

Data analysis often takes a back seat to data collection. As a result, efforts to gather data on students too often yield little information that can be used in self-assessments of institutional effectiveness. Without the intermediary steps of synthesis and interpretation, data collection itself rarely leads to useful insights.

College leaders can avoid this trap by setting guidelines for reporting and using data generated by the student tracking system. The guidelines should call for the generation of reports that detail indicators of student flow

and achievement in simple, non-punitive formats. Those developing the reports should keep several caveats in mind:

- o Keep each report brief (no more than two pages) and focused on one indicator or on a group of related indicators (for example, indicators related to retention, transfer, remediation, or vocational development).
- o Provide the operational definitions of the indicators detailed in each report.
- o Avoid rank-order comparisons that might be misinterpreted as quality judgments. For example, if transfer rates are reported by the student's program of study, care should be taken to explain that program areas with higher transfer rates do not necessarily do a better job of preparing students for transfer than other program areas with lower transfer rates. Numerous factors, including student educational objectives, may be at work.
- o Stress the fact that indicators are not absolute measures and are hence not the final word on student outcomes. For example, a declining transfer rate for successive cohorts may or may not indicate a problem in the college's ability to prepare students for upper-division study. Further research will be needed to investigate the causes of the trend.
- o Avoid complex inferential statistics, such as factor analysis or regression. Simple tables or cross-tabulations will suffice. If more complex analyses are warranted, these can be completed as secondary analyses of the tracking data base and reported in separate studies.
- o Issue the reports on a regular basis to the college community and encourage comments on the trends revealed in the data.

The dissemination of simple, well-defined reports increases awareness of the student tracking system beyond the institutional research office and encourages examination of the tracking system's data by a wide segment of the college community.

Conclusion

Today's outcomes assessment movement places great expectations on the ability of colleges to generate longitudinal data on student flow and achievement. Computers and the technical skills of data managers will play an important role in meeting these expectations. But outcomes assessment is a form of inquiry, not just a data collection task. Its success depends to a large degree on how clearly the goals of that inquiry are stated and how the results of the inquiry are used. As colleges develop student tracking systems in response to demands for outcomes information, the president's involvement will assure that investment in data collection yields information that provides needed insights into how students use community colleges and how the college experience affects career and academic development.

Some may argue that the approach advocated here-- building a tracking system around pre-defined indicators-- unnecessarily limits the data base and that it would be better to proceed on a post-hoc basis, organizing all available student data into the tracking system and using the computer to analyze outcomes for student cohorts against all possible combinations of student attributes and persistence patterns. The reasoning here is that today's computer systems facilitate the analysis of large data sets and that this capacity allows researchers to search for and examine the multiple determinants of student retention and

achievement. By limiting the tracking system to data required for a pre-determined set of indicators, it can be argued, important insights into student flow may be missed.

Though this reasoning may at first seem compelling, the dangers of the post-hoc approach should be recognized. Searching for indicators after the data have been collected results in a rudderless tracking system, one in which the data that happen to be at hand guide the college's research effort rather than policy issues related to institutional effectiveness. In addition, the post-hoc approach assumes that the more data collected, the better. This discourages limitations in data based size and may result in relatively large data sets that take an inordinate amount of time to maintain. Finally, the post-hoc approach leaves the impression that one can create an all-purpose data base with the capacity to answer most (if not all) questions about student flow and attainment that may arise. This is an impossible premise that sets the tracking system up for failure. Regardless of the computer's ability to combine and compare data in multiple formats, no data base can address all questions about student college experiences. It is far better to state in advance what questions the tracking system is designed to answer. By defining indicators of student progress, the college president articulates the purpose of the tracking system and provides guidance for its design and use.